

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) A method for inhibiting hydrate formation blockage in a flow line transporting a hydrocarbon containing fluid, the method comprising:

adding water to a hydrocarbon containing fluid to produce a water cut enhanced hydrocarbon containing fluid, the water being added being free of substantial quantities of hydrate inhibitors selected from the group of alcohols, glycols, and surfactant or polymeric hydrate inhibitors; and

transporting the water cut enhanced hydrocarbon containing fluid through a flow line under conditions that would be conducive for the formation of hydrates in the original hydrocarbon containing fluid;

whereby hydrate formation blockage is inhibited from forming within the flow line by the addition of the water.

Claim 2. (Original) The method of claim 1 wherein:
sufficient water is added such that the water cut of the water cut enhanced hydrocarbon containing fluid is at least 50%.

Claim 3. (Original) The method of claim 1 wherein:
sufficient water is added such that the water cut of the water cut enhanced hydrocarbon containing fluid is at least 75%.

- Claim 4. (Original) The method of claim 1 wherein:
sufficient water is added such that the water cut of the water cut enhanced
hydrocarbon containing fluid is at least 85%.
- Claim 5. (Original) The method of claim 1 wherein:
sufficient water is added to lower the hydrate equilibrium temperature of the
water cut enhanced hydrocarbon containing fluid by at least 2°F relative to the
original hydrocarbon containing fluid.
- Claim 6. (Original) The method of claim 1 wherein:
sufficient water is added to lower the hydrate equilibrium temperature of the
water cut enhanced hydrocarbon containing fluid by at least 5°F relative to the
original hydrocarbon containing fluid.
- Claim 7. (Original) The method of claim 1 wherein:
salt is added to the water to increase the salinity of the water cut enhanced
hydrocarbon containing fluid.
- Claim 8. (Original) The method of claim 7 wherein:
the weight % of salt in the water cut enhanced hydrocarbon containing fluid is at
least 5%.
- Claim 9. (Original) The method of claim 7 wherein:
the weight % of the salt in the water cut enhanced hydrocarbon containing fluid
is at least 10%.

- Claim 10. (Original) The method of claim 7 wherein:
the water phase of the water cut enhanced hydrocarbon containing fluid is continuous; and

the water cut enhanced hydrocarbon containing fluid has a weight % of salt of at least 5%.
- Claim 11. (Original) The method of claim 1 wherein:
the water is added to the hydrocarbon containing fluid at a sub sea location.
- Claim 12. (Original) The method of claim 1 wherein:
sufficient water is added such that hydrate formation is self limiting as hydrocarbon hydrate forming components in the water cut enhanced hydrocarbon containing fluid are exhausted through the formation of hydrate particles.
- Claim 13. (Currently amended) The method of claim 1 wherein:
sufficient water is added such that the hydrocarbon containing fluid is converted from a[[n]] water-in-oil emulsion to a water-continuous emulsion thereby decreasing emulsion viscosity and reducing pressure drop in the flow line.
- Claim 14. (Currently amended) A system for preventing the formation of hydrate blockage in a flow line, the system comprising:

a flow line for transporting a hydrocarbon containing fluid;

a water injection conduit fluidly connected to the flow line to add water to the flow line, the water injection conduit being in fluid communication with one of a source of sea water, a source of fresh water, a subsea well or water produced from fluids from a hydrocarbon producing well bore; and

a hydrocarbon source which is in fluid communication with the flow line to provide a hydrocarbon containing fluid to the flow line;

wherein water may be added to the flow line from the water injection conduit to enhance the water cut of the hydrocarbon containing fluid.

Claim 15. (Original) The system of claim 14 wherein:
the hydrocarbon source is a well bore.

Claim 16. (Original) The system of claim 14 further comprising:

a water source fluidly connected to the water injection conduit; and

the water source is one of sea water, a sub sea water well or a water source mounted on an offshore platform.

Claim 17. (Original) The system of claim 14 further comprising:
a water separator fluidly connected to the flow line to receive fluids containing hydrocarbons and water, the water separator being capable of separating water from hydrocarbons.

Claim 18. (Original) The system of claim 17 wherein:
the flow line, water separator and water injection conduit cooperate to form a loop wherein water from the flow line may be separated by the water separator and delivered back to the water injection conduit to be reinjected into the flow line.

Claim 19. (Original) The system of claim 14 further comprising:
a salt dispenser which connects relative to the flow line so that salt may be added to increase the salinity of the hydrocarbon containing fluid.

- Claim 20. (New) The system of claim 14 wherein:
the water injection conduit is in fluid communication with a source of sea water.
- Claim 21. (New) The system of claim 14 wherein:
the water injection conduit is in fluid communication with a subsea well.
- Claim 22. (New) The system of claim 14 wherein:
the water injection conduit is in fluid communication with separated water
produced from a hydrocarbon producing well bore.
- Claim 23. (New) The system of claim 14 wherein:
the water injection conduit is in fluid communication with a source of fresh
water.
- Claim 24. (New) A method for inhibiting hydrate formation blockage in a flow line
transporting a hydrocarbon containing fluid, the method comprising:
- adding water to a hydrocarbon containing fluid to produce a water cut enhanced
hydrocarbon containing fluid, wherein sufficient water is added such that the
water cut of the water cut enhanced hydrocarbon containing fluid is at least 50%;
and
- transporting the water cut enhanced hydrocarbon containing fluid through a flow
line under conditions that would be conducive for the formation of hydrates in
the original hydrocarbon containing fluid;
- whereby hydrate formation blockage is inhibited from forming within the flow
line by the addition of the water to form a slurry of hydrates and water.

Claim 25. (New) A method for inhibiting hydrate formation blockage in a flow line transporting a hydrocarbon containing fluid, the method comprising:

adding water to a hydrocarbon containing fluid to produce a water cut enhanced hydrocarbon containing fluid, wherein sufficient water is added such that hydrate formation is self limiting as hydrocarbon hydrate forming components in the water cut enhanced hydrocarbon containing fluid are exhausted through the formation of hydrate particles; and

transporting the water cut enhanced hydrocarbon containing fluid through a flow line under conditions that would be conducive for the formation of hydrates in the original hydrocarbon containing fluid;

whereby hydrate formation blockage is inhibited from forming within the flow line by the addition of the water to form a slurry of hydrates and water.

Claim 26. (New) A method for inhibiting hydrate formation blockage in a flow line transporting a hydrocarbon containing fluid, the method comprising:

adding water to a hydrocarbon containing fluid to produce a water cut enhanced hydrocarbon containing fluid, wherein sufficient water is added such that the hydrocarbon containing fluid is converted from an water-in-oil emulsion to a water-continuous emulsion thereby decreasing emulsion viscosity and reducing pressure drop in the flow line; and

transporting the water cut enhanced hydrocarbon containing fluid through a flow line under conditions that would be conducive for the formation of hydrates in the original hydrocarbon containing fluid;

whereby hydrate formation blockage is inhibited from forming within the flow line by the addition of the water to form a slurry of hydrates and water.